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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/713,105 | 11/17/2003 | Souji Kihira | 117797 | 9764 |
| 25944 | 7590 | 06/17/2004 | EXAMINER | |
| OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320 | | | MAYO III, WILLIAM H | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2831 | |

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|---|-----------------------------------|
| Office Action Summary | Application N . | Applicant(s) |
| | 10/713,105 Examiner William H. Mayo III | KIHIRA, SOUJI Art Unit 2831 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-6 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/17/2004</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in present Application No. 10/713,105, filed on December 19, 2003.

Information Disclosure Statement

2. The information disclosure statement filed November 17, 2003 has been submitted for consideration by the Office. It has been placed in the application file and the information referred to therein has been considered.

Specification

3. The disclosure is objected to because of the following informalities: The specification contains a few misspelled words, which is incorrect content for the specification. The applicant should proofread the specification to correct all misspelled words. An example of a misspelled words appears on page 3, line 24, which discloses "lccording".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Own Admission of Prior Art (herein referred to as AOAPA) in view of Morgan et al (Pat Num 5,473,117, herein referred to as Morgan). AOAPA discloses under the heading "Description of the Related Art" that shielded wire harnesses are commonly utilized for connecting machines such as an inverter unit and a motor in an electrical vehicle (Page 1, lines 9-11 of applicant's specification). Specifically, with respect to claim 1, AOAPA discloses that the well known shielded wire harness comprises a plurality of wires (Page 1, lines 11-18); a plurality of wire-side terminals respectively connected to an end portions of the wires (Page 1, lines 11-18), and configured to be connected respective terminals disposed within a shield case of an equipment (Page 1, lines 11-18).

However, AOAPA doesn't necessarily disclose the shielding member formed of a tube shape and configured to enclose the plurality of wires collectively and to be connected to the shield case, wherein the shielding member comprises a main shield portion made of a metal pipe, and a sub-shield portion formed shorter than the main shield portion to be configured and deformable (claim 1), nor the sub-shield portion comprises a braided member formed in a tube shape by braided metal thin lines (claim 2), nor the shielding member further comprising a connecting pipe made of metal and connected to

the main shield portion; and a shield shell having a conductive characteristic and configured be connected the shield case, wherein one end portion of the braided member is connected to the connecting pipe, and the other end portion of the braided member being connected to the shield shell (claim 3), nor the shielding means comprising a drain hole (claim 5), nor the drain hole being formed at the lower most position of the wiring route of the shielded wire harness and opened in substantially downward direction (claim 6).

Morgan teaches a method and apparatus (Figs 1-7) for flexibly shielding the end of a large cable from EMI (Col 1, lines 5-10) such that the method and apparatus eliminate or reduces disadvantages and problems associated with prior apparatuses for shielding large cables (Col 1, lines 50-55). Specifically, with respect to claim 1, Morgan teaches a shielding member (24) formed of a tube shape and configured to enclose the plurality of wires (18) collectively and to be connected to the shield case (52), wherein the shielding member (24) comprises a main shield portion made of a metal pipe (14), and a sub-shield portion (26) formed shorter than the main shield portion (14, Fig 8) and configured to be configured and deformable (Col 4, lines 3-8). With respect to claim 2, Morgan teaches that the sub-shield portion (26) comprises a braided member formed in a tube shape by braided metal thin lines (Col 3, lines 53-55). With respect to claim 3, Morgan teaches that the shielding member (24) further comprising a connecting pipe (14) made of metal and connected to the main shield portion (16, Col 1, lines 4-10); and a shield shell (36) having a conductive characteristic (Col 3, lines 53-55) and configured be connected the shield case

(52, Fig 8), wherein one end portion of the braided member (26) is connected to the connecting pipe (14), and the other end portion of the braided member (26) being connected to the shield shell (36). With respect to claim 5, Morgan teaches that the shielding means (24) comprising a drain hole (40, Col 9-16). With respect to claim 6, Morgan teaches that the drain hole (40) is formed at the lower most position of the wiring route of the shielded wire harness (Figs 4-5) and opened in substantially downward direction (Col 4, lines 9-25).

With respect to claims 1-3 and 5-6, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the wiring harness of AOAPA to comprise the shield configuration as taught by Morgan because Morgan teaches that such a configuration provides flexibly shielding the end of a large cable from EMI (Col 1, lines 5-10) such that the method and apparatus eliminate or reduce disadvantages and problems associated with prior apparatuses for shielding large cables (Col 1, lines 50-55).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Own Admission of Prior Art (herein referred to as AOAPA) in view of Morgan (Pat Num 5,473,117), as applied to claim 1 above (herein referred to as modified AOAPA), further in view of Lawson et al (Pat Num 3,280,246, herein referred to as Lawson). Modified AOAPA discloses under the heading "Description of the Related Art" that shielded wire harnesses are commonly utilized for connecting machines such as an inverter unit and a motor in an electrical vehicle (Page 1, lines 9-11 of applicant's specification).

However, modified AOAPA doesn't necessarily disclose the connecting pipe being plated (claim 4).

Lawson teaches a plurality of wires (Figs 1-8) being shielded against high frequency currents by means of a braided metallic covering (Col 1, lines 9-14) that eliminates the disadvantages of the prior art shields (Col 1, lines 37-40). Specifically, with respect to claim 4, Lawson teaches a shielding device (10) surrounding a plurality of wires (12), wherein the shielding device (10) comprises an outer annular tube (18), that may be made of tinned brass (Col 2, lines 65-71).

With respect to claim 4, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the shielding device of modified AOAPA to comprise the tube being made of tinned brass as taught by Lawson because Lawson teaches that such a configuration provides shielding against high frequency currents by means of a braided metallic covering (Col 1, lines 9-14) that eliminates the disadvantages of the prior art shields (Col 1, lines 37-40) and since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Auclair (Pat Num 5,315,063), Kellems (Pat Num 1,966,929), Beckloff et al (Pat Num 5,015,805), Ikeda (Pat Num 6,085,416),

Perretta et al (Pat Num 5,244,417), Canfield (Pat Num 2,939,905), and Gillemot et al (Pat Num 3,777,049), all of which disclose shielding devices for wiring.

Communication

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William H. Mayo III
Primary Examiner
Art Unit 2831